

**Work Order ID** 102432

May-28-13 10:10:59 AM

\*102432\*

Page 1

Approvals: Process Plan: MLJ Date: 13-05-29 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>					
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>					
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <hr/> <hr/> <hr/>		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <hr/> <hr/> <hr/>	

**Work Order ID 102432****\*102432\***

Page 2

May-28-13 10:10:59 AM

Item ID: D3901-1

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Bar

Start Date: 5/27/13 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 5/29/13 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC	QC2- Inspect parts off machine FAI/FAIB	0.00	B-A	13/06/20	8	0			DAS 08 28-89
Quality Control	Memo	0.00							

130 <b>*130*</b> QC	QC8- Inspect parts - second check	0.00	13-6-21	8	0				DAS 04 28-89
Quality Control	Memo	0.00							

140 <b>*140*</b> Packaging Packaging	Identify as per dwg & Stock Location: <u>W4001</u>	0.00	8	13-06-24	MA1
	Memo	0.00			

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS							
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>													
FAULT CATEGORY													
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

**Work Order ID** 102432

**\*102432\***

Page 3

May-28-13 10:10:59 AM

Item ID: D3901-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Bar

Start Date: 5/27/13 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 5/29/13 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

**\*150\***

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

13/6/2013

PL 13-06-24

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____	Work Order Update <input type="checkbox"/>						

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

## FAULT CATEGORY

<b>Landing Gear</b>	<b>General</b>														
	<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced										
	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure										
	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld										
	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled										
	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved											
	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong											
	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge											
	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset												
	<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration												
	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence												
	<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions												

# Picklist Print

May-28-13 10:10:58 AM

Page 1

Work Order ID: 102432

Parent Item: D3901-1

Parent Item Name: Bar

Start Date: 5/27/13

Required Date: 5/29/13

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP RevA: New issue DD verified by:EC  
verified by:JLM

IPP RevB: Now on cnc JFS 12/02/13

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.250x0.500 304 BAR .250 x .500		Purchased	No			100	f	538.1810	4.513	38.004210			

Location	Loc Qty	Loc Code
MAT049	538.181	
5 → 123902	2.992	
124518	222.855	
3 → 125367	36.334	
m125804	276	

23  
13.8

on 13/06/14

NOT PULL FROM COMAS

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			<b>DISPOSITION</b>		<b>AGAINST DEPARTMENT/PROCESS</b>						
			<input type="checkbox"/> Rework	<input type="checkbox"/> Skid-tube	<input type="checkbox"/> Crosstube	<input type="checkbox"/> Water Jet	<input type="checkbox"/> Engineering				
			<input type="checkbox"/> Scrap	<input type="checkbox"/> Machining	<input type="checkbox"/> Small Fab	<input type="checkbox"/> Prod. Eng. Coor.	<input type="checkbox"/> Quality				
			<input type="checkbox"/> Use-as-is	<input type="checkbox"/> Thermoforming	<input type="checkbox"/> Finishing	<input type="checkbox"/> Rec/Store/Packaging	<input type="checkbox"/> Other				
			<input type="checkbox"/> Work Order Update	<input type="checkbox"/> Large Fab	<input type="checkbox"/> Composite	<input type="checkbox"/> Supplier					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <hr/> <hr/> <hr/>	
										<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
										<input type="checkbox"/> Other	

DART AEROSPACE LTD	Work Order:	102732
Description: Bar	Part Number:	D3901-1
Inspection Dwg: D3901	Rev: E	Page 1 of 1

## **FIRST ARTICLE INSPECTION CHECKLIST**

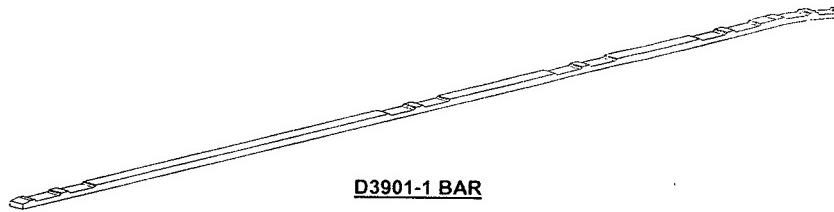
Measured by:	<u>J.A</u> <u>DAS</u> <u>08</u> <u>9-83</u>	Audited by:	<u>C.</u> <u>8-83</u>	Preliminary Approval:	
Date:	<u>13/06/20</u>	Date:	<u>B.C.2)</u>	Date:	

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	
B	12.07.31	Dimensions updated per Dwg Rev C	KJ	
C	12.09.26	Dimensions updated per Dwg Rev E	KJ	<i>[Signature]</i>

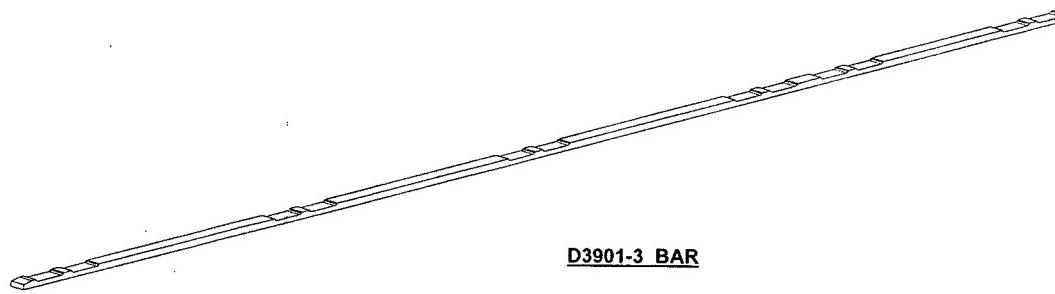
3 6 5 4 2 1

D

D



D3901-1 BAR

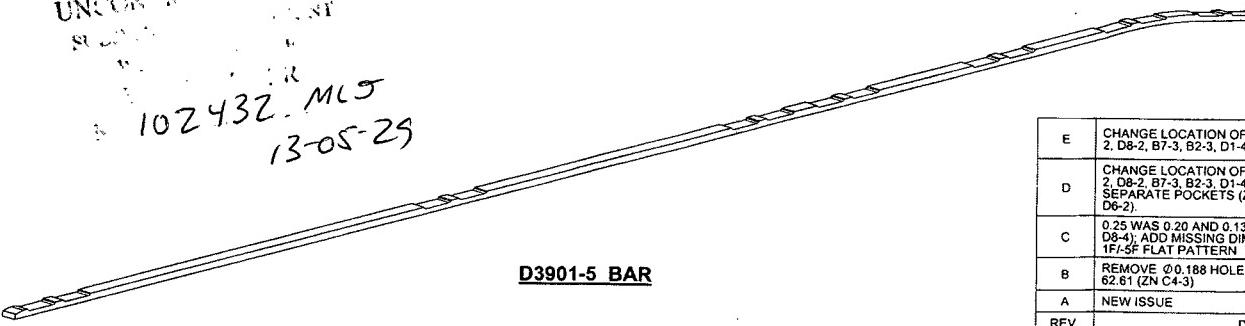


D3901-3 BAR

UNCONVENTIONAL  
SOLVED

COPY

102432 ML5  
13-05-25



D3901-5 BAR

RELEASED  
2012-09-04  
*WP*

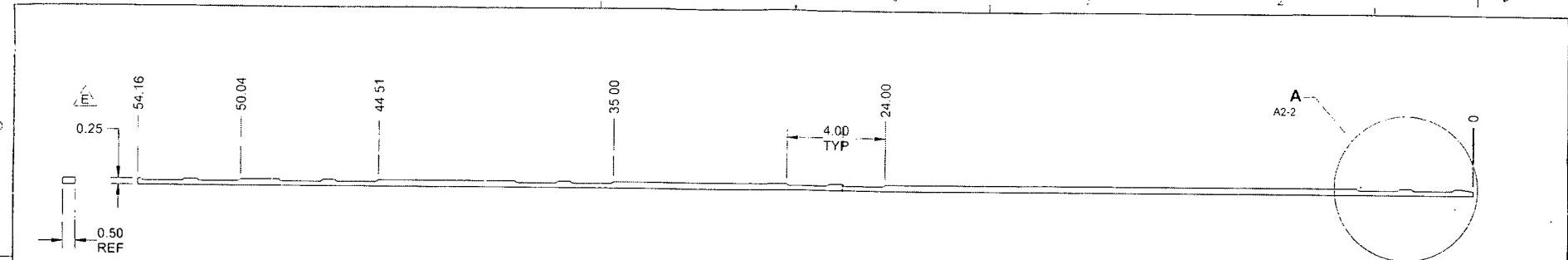
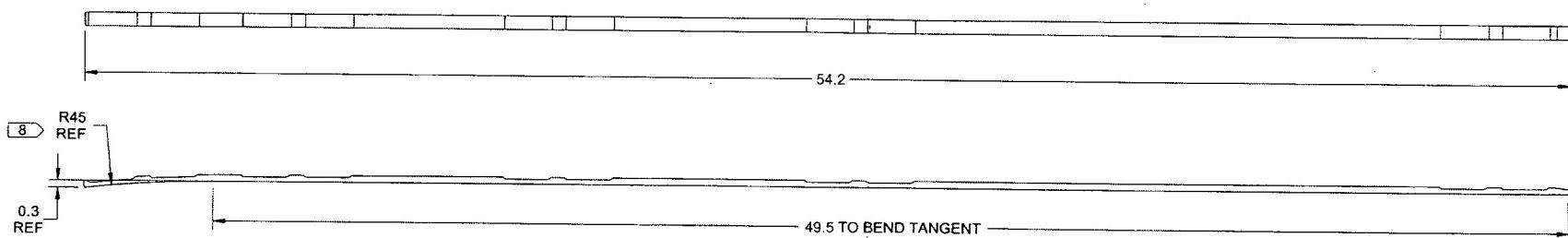
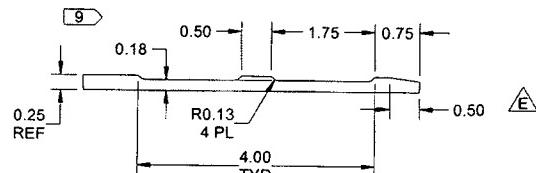
E	CHANGE LOCATION OF END POCKETS ON -1/-3/-5 (ZN B1-2, D8-2, B7-3, B2-3, D1-4, D7-4).	DC	12.08.23
D	CHANGE LOCATION OF END POCKETS ON -1/-3/-5 (ZN D1-2, D8-2, B7-3, D1-4, D8-4); SPLIT POCKETS INTO TWO SEPARATE POCKETS (ZN A2-2). ADD POCKET TO -1 (ZN D6-2).	DC	12.08.21
C	0.25 WAS 0.20 AND 0.130 WAS 0.080 (ZN B2-2, B1-2, B1-3, D8-4); ADD MISSING DIMENSIONS (ZN C5-3); ADD D3901-1F/-SF FLAT PATTERN	RF	12.01.24
B	REMOVE Ø0.168 HOLES FROM D3901-1/-3/-5; 62.12 WAS 62.61 (ZN C4-3)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	B▼	DATE
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	<i>DC</i>	DRAWING NO.	REV. E.
CHECKED	<i>AS</i>	D3901	SHEET 1 OF 4
MFG. APPR.	<i>SA</i>	TITLE	SCALE
APPROVED	<i>WP</i>	BAR	NTS
DE APPR.	<i>WP</i>		
DATE	12.08.23	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

A

A

102432

**D3901-1F BAR FLAT PATTERN****D3901-1 BAR  
(MAKE FROM D3901-1F)**

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR, 0.250 THICK X 0.500 WIDTH PER ASTM A276 OR ASTM A240  
REF. DART SPEC. M304B0.250X0.500
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 1.78 lbs
  - 8) FORM TO FIT WEARPLATE
  - 9) ANGLE TO BE DETERMINED BY AVAILABLE TOOLING

**RELEASED** *[Signature]* 2012-09-06

DESIGN	RF	DART AEROSPACE USA, INC.		
DRAWN	<i>[Signature]</i>	KENT, WA		
CHECKED	<i>[Signature]</i>	REV. E		
MFG. APPR.	<i>[Signature]</i>	D3901		
APPROVED	<i>[Signature]</i>	SHEET 2 OF 4		
DE APPR.	<i>[Signature]</i>	TITLE		
DATE	12-08-23	SCALE		
		NTS		

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